# **12.0 LIST OF PREPARERS**

This joint DEIS/ DEIR /DRI document has been developed under the direction of the USACE with input from the following list of preparers. Not all portions of the document were written by USACE staff. The NEPA required elements of the document were prepared at the direction of the USACE to meet its requirements for NEPA. The USACE employed a third party contractor, TRC Environmental Inc. to develop portions of the document, often using data provided by the Applicant (Cape Wind Associates, LLC.) and the Applicant's consultants<sup>105</sup>. The Applicant's lead consultant ESS Group, Inc. was responsible for preparing the non-NEPA (those related to MEPA and/or the CCC) sections of the document. In addition to the list of preparers below, staff of the Cooperating Agencies (see Section 10) provided technical review of the document.

## **United States Army Corps of Engineers**

Name/Title: Karen Kirk Adams, Chief, Permits & Enforcement Branch, Corps of Engineers New England

District.

**Education:** B.S. Civil Engineering

**Experience:** 20 years experience in Corps of Engineers Regulatory Program **Role in EIS:** Permit/EIS Project Manager, contributed to overall document.

Name/Title: Susan E. Holtham, Environmental Resource Specialist, Evaluation Branch, Corps of Engineers

New England District.

**Education:** AA. Liberal Arts, B.S. Biology **Experience:** 27 years of experience

Role in EIS: Assisted Project Manager in NEPA compliance and reviews, contributed to overall document,

drafted section 1.

Name/Title: Edmund O'Leary, Senior Regional Economist, Evaluation Branch, Corps of Engineers New England

District.

**Education:** B.A. History, M.A.

**Experience:** Economics, 25 years of experience

Role in EIS: Assisted in development of purpose and need, and economic analyses.

Name/Title: Karen Umbrell, Regional Economist, Evaluation Branch, Corps of Engineers New England District.

**Education:** BA Economics, UMASS Amherst

Experience: Experience consists primarily of conducting economic benefit analyses and socioeconomic

analyses for Corps of Engineers water resources projects. **Role in EIS:** Reviewed Section 5.16, Socioeconomics

Name/Title: Kathleen A. Atwood, Archaeologist, Evaluation Branch, Corps of Engineers, New England District.

**Education:** M.A., History/Historical Archaeology

**Experience:** 17 years with Corps of Engineers, working on NHPA coordination and compliance issues for the

Regulatory, Superfund, Military, and Civil Works programs.

**Role is EIS:** Assisted Project Manager in developing scopes of cultural resource studies, NHPA compliance including agency determinations of effect, and review of appropriate sections of the document.

# TRC Environmental Corporation

Name/Title: Lynn Gresock/Principle and Project Analyst

**Education:** Graduate Courses, Environmental Studies, Harvard University

B.S., Environmental Design, University of Massachusetts

**Experience:** 20 years experience with regulatory issues relating to environmental permitting and compliance for a wide range of projects.

**Role in EIS:** Final TRC QA review for Sections 3 and 5 of the DEIS as well as safety and telecommunications sections.

<sup>&</sup>lt;sup>105</sup> As provided for by NEPA (40 C.F.R.§ 1506.5) as well as question 15 in CEQ's Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, published at 46 Federal Register 18026 (March 16, 1981)

Name/Title: Paul Martin/Senior Ecologist

M.S., Marine Ecology, University of New Hampshire, 1988 **Education:** 

B.A., Biology, Carleton College, 1982

Experience: 18 years experience as a fisheries and wetland scientist, coastal ecologist, terrestrial biologist. licensing specialist, and project manager.

Role in EIS: Prepared benthic, fisheries, oceanography, protected marine species, and water baseline resource characterization and impact analyses for wind park alternatives in Section 3 and these topics plus wetlands and terrestrial ecology for Section 5 of the DEIS.

Name/Title: Steve Wallace/Senior Planner

Education: B.A., Biology, Brown University, 1969

Experience: Over 25 years experience with environmental permitting, regulatory review, and siting analysis

for energy projects.

Prepared visual, recreation, aviation, navigation, and socioeconomic baseline resource Role in EIS: characterization and impact analyses for wind park alternatives in Section 3 and Section 5 of the DEIS.

Name/Title: Anthony Agresti/Senior Noise Analyst

B.A., Meteorology, Kean College of New Jersey, 1984 **Education:** 

Experience: 15 years experience in noise assessments for cogeneration/independent power and industrial

clients.

Role in EIS: Prepared noise baseline resource characterization and impact analysis for wind park alternatives in Section 3 and Section 5 of the DEIS.

Name/Title: Michael Tyrrell/Senior Biologist

B.S., Natural Resources Science, University of Rhode Island, 1986 Education:

Experience: 14 years experience with wetlands and wildlife inventories and evaluation, vegetative mapping, and wetland delineations.

Role in EIS: Prepared avian baseline resource characterization and impact analysis for Section 5 of the DEIS.

Name/Title: Jon Pollock/Senior Meteorologist

M.S., Meteorology, Massachusetts Institute of Technology, 1979 **Education:** B.S., Geology and Geophysics, Yale University, New Haven, Connecticut 1976

24 years experience with air quality including designing and negotiating modeling protocols with Experience: regulatory agencies, directing modeling and other special studies, and developing technical and permitting approaches.

Role in EIS: Prepared air quality and climate baseline resource characterization and impact analysis for wind park alternatives in Section 3 and Section 5 of the DEIS.

Name/Title: Raymond Pasquariello/Senior Archaeologist

M.A., Anthropology, 1995; B.S., Biology, 1992; B.A., Anthropology, 1992, Syracuse University, **Education:** Over 10 years experience directing archaeological survey, testing, and data recovery projects. Experience: Prepared cultural resources baseline resource characterization and impact analysis for wind park Role in EIS: alternatives in Section 3 and Section 5 of the DEIS.

Name/Title: Dennis Blais/Biologist

**Education:** M.S., Biology, State University of New York at Binghamton, 1996; B.S., Biology, St. Lawrence University, 1989

Experience: Over 10 years experience with environmental permitting, ecological study design and implementation, endangered and threatened species work, wetlands delineations, and ecological assessments.

Role in EIS: Prepared avian and upland resources baseline resource characterization for Section 3 wind park alternatives of the DEIS.

Name/Title: David Estey/Electrical Engineer

M. S., Management, Thomas College, 1980; B. S., Electrical Engineering, University of New **Education:** Hampshire, 1974

**Experience:** 29 years experience in the electric utility industry with five years devoted to customer service activities; eight years devoted to rate and regulatory activities; and 16 years devoted to electrical engineering and engineering consulting.

**Role in EIS:** Prepared electric and magnetic field (EMF) and telecommunications baseline resource characterization and impact analyses for wind park alternatives in Section 3 and Section 5 of the DEIS.

Name/Title: Colin Duncan/Senior Soil Scientist

**Education:** M.S., Natural Resources Science, University of Rhode Island, 1991; B.S., Plant and Soil Science, University of Massachusetts - Amherst, 1986

**Experience:** 17 years of experience in environmental permitting, wetland mapping and delineation, soil characterization, upland and wetland restoration, and wildlife studies.

**Role in EIS:** Prepared geology/soils/sediments baseline resource characterization and impact analysis for windpark alternatives in Section 3 and Section 5 of the DEIS.

### ESS Group, Inc.

Name/Title: Christopher G. Rein, Senior Vice President, Principal Energy & Industrial Services, ESS Group, Inc.

**Education:** B.S. Resources Management, Post-Graduate Studies in Mechanical Engineering

**Experience:** Senior consultant with more than 20 years experience specializing in regulatory interpretation, multi-disciplinary environmental projects and the comprehensive evaluation of impacts related to the siting of energy-related facilities.

**Role in EIS:** Principal-in-Charge for ESS project team; provided quality control oversight and contributed to overall document.

Name/Title: Terry L. Orr, Project Manager, ESS Group, Inc.

**Education:** B.S. Environmental Resource Management, B.S. Resource Management

**Experience:** More than 20 years of experience in operations and project management. Experience includes

alternatives analysis, site assessment and planning, linear routing, regulatory permitting, and logistics

**Role in EIS:** Project Manager for the ESS project team; contributed to all aspects of document preparation.

Name/Title: Heather L. Heater, Project Regulatory Specialist, ESS Group, Inc. Education: M.S. Environmental Resources Management, B.S. Marine Biology

**Experience:** Over six years of experience in coastal environmental management, marine and coastal biology and coastal permitting/shoreline assessment. Technical experience includes environmental regulatory compliance, regulatory permitting strategies, preparation and filing, and has coordinated regulatory permit processing at the federal, state, regional and local levels for various projects.

**Role in EIS:** Assistant Project Manager for ESS project team; contributed to all aspects of document preparation

Name/Title: Susan M. Herz, Senior Project Manager, ESS Group, Inc.

**Education:** M.E.M. Coastal Environmental Management, B.S. Biology, Sea Education Association (SEA) Program, Marine & Nautical Sciences

**Experience:** More than 11 years experience in coastal environmental management, water quality management, hazardous waste management, and marine and coastal biology. Technical experience includes water quality, sediment, and oceanographic field sampling; fisheries field sampling and research and strategic regulatory permitting.

**Role in EIS:** Contributed to the discussions on sediment transport, benthic, finfish and protected marine species in Sections 3 and 5.

Name/Title: Jeffrey Burm, Environmental Scientist, ESS Group, Inc.

**Education:** M.S. Spatial Data Analysis - Wetlands Concentration, B.S. Wildlife Management

**Experience:** More than 11 years of experience in geographic information systems (GIS), wildlife management, wetland inventories and delineation, watershed management, coastal zone management, distribution and abundance of wildlife populations on many species worldwide, habitat delineation, wildlife monitoring, park management and environmental law enforcement.

**Role in EIS:** Conducted avian field studies and contributed to all Appendices to 5.7; Contributed to avian discussions in Sections 3 and 5; Provided GIS graphics support throughout the document.

Name/Title: Payson R. Whitney, III, PE, Project Manager, ESS Group, Inc.

Education: B.S. Civil Engineering

More than 10 years of engineering experience in both civil/site engineering and coastal Experience: permitting/shoreline assessment. Extensive experience in the planning and execution of marine geophysical and geotechnical surveys for coastal and offshore projects such as submarine electric cables, offshore generating facilities, marinas, and dredging.

Role in EIS: Managed geophysical / geotechnical field programs, lead preparer of Appendix 5.12-A and contributed to discussions on geology, sediment transport, physical oceanography, project construction and navigation in Sections 3, 4 and 5.

Name/Title: Sarah Faldetta, CPG, Senior Environmental Scientist, ESS Group, Inc. M.A. Geology, M.B.A. Business Administration, B.A. Geology and English **Education:** 

More than 20 years experience in environmental and geological sciences and regulatory Experience: permitting. Experience includes coordination and management of marine and upland cultural resource investigations and visual assessments, planning and implementing geologic and groundwater investigations.

Role in EIS: Coordinated cultural and visual field studies; contributed to discussions on geology, cultural, recreational and visual in Sections 3 and 5.

Name/Title: Carl Nielsen, Senior Water Resources Scientist, ESS Group, Inc.

Education: M.S. Fisheries and Wildlife, B.A. Biology, Water Quality Modeling for TMDLs 40-hr. Workshop

Experience: Over 14 years of experience in the assessment and evaluation of aquatic ecosystems.

Conducted benthic field studies and lead author of Appendices to Section 5.3; contributed to Role in EIS: benthic, finfish and water quality discussions in Sections 3 and 5.

Name/Title: Richard Kleiman, Vice President, Ecological & Environmental Permitting Services, ESS Group, Inc.

Education: M.B.A., M.S. Environmental Science, B.A. English

More than 14 years of experience in environmental project management, watershed Experience: management, wetlands science, water quality assessment, wildlife management, habitat assessment, and energy facility siting.

Role in EIS: Contributed to discussions on terrestrial ecology, avian resources, wetlands, and water quality in Sections 3 and 5.

Name/Title: Ann B. McMenemy, PWS, Senior Wetland Scientist, ESS Group, Inc. B.S. Plant and Soil Sciences. Graduate level courses in Soil Sciences Education:

Experience: Certified Professional Wetland Scientist (PWS) and New Hampshire Certified Wetland Scientist with more than 17 years experience in environmental assessment and permitting of public and private projects. Her technical expertise includes wetland delineation, ecological inventories, wildlife habitat evaluations, assessment and mitigation, rare species investigation and mitigation, storm water and water quality design, and monitoring

Role in EIS: Contributed to wetland and water quality discussions in Section 3 and Section 5

Name/Title: Rebecca Weissman, Ecologist, ESS Group, Inc.

**Education:** M.S. Zoology, B.S. Biology and Environmental Studies

More than 4 years of experience in wetlands permitting and delineation and more than 8 years of Experience: experience in wildlife ecology research. Specializes in the ecology of amphibians and wetland delineations.

Conducted field work on upland cable route and contributed to discussions on terrestrial ecology, Role in EIS: wetlands and water quality in Sections 3 and 5.

Name/Title: Stephen B. Wood, Vice President, Energy & Industrial Services, ESS Group, Inc.

Education: J.D., M.B.A., B.A. Biology

More than 25 years of experience in environmental licensing and permitting and project Experience:

management. Specializes in site design and permitting strategies for energy related projects.

Contributed to the discussions on regulatory permitting, cable route design and electrical and Role in EIS: magnetic fields in Sections 3, 5 and 7.

Name/Title: Dammon Frecker, Vice President, Energy & Industrial Services, ESS Group, Inc.

**Education:** B.S. Chemical Engineering

Experience: Over 19 years of experience in providing environmental permitting and compliance services to industry, regulated utilities and merchant power companies. Specializes in air quality issues associated with power generation including permitting, emissions control technology analyses, regulatory analysis, and strategic planning.

Role in EIS: Contributed to Air and Climate discussions in Sections 3 and 5

Name/Title: William Campbell, Industrial Compliance Specialist, ESS Group, Inc.

B.S., Environmental Sciences **Education:** 

Experience: More than six years of experience in providing environmental, health and safety services to

industrial facilities.

Role in EIS: Contributed to discussions on alternative generating technologies, air and climate, and health and safety for Sections 3 and 5.

#### **Battelle**

Name/Title: Jennifer M. Field, Principal Research Scientist, Battelle **Education:** M.S. Biological Science, Old Dominion University

9 years experience in the environmental field conducting ecological and human health risk Experience: assessments, NEPA environmental impact assessments, parametric and non-parametric statistical analyses of aguatic biotic and abiotic data, including benthic and fish community diversity indices.

Role in EIS: Contributed to: EFH Assessment, Biological Assessment, Environmental Consequences, Finfish Data Appendix.

Name/ Title: Amanda Bourgue, Research Scientist, Battelle

A.L.M. Biology, Harvard University Education:

Experience: 4 years experience in the environmental field conducting NEPA and international environmental impact assessments and resource surveys for coastal and marine projects, coral reef restoration, and dredged material management

Role in EIS: Contributed to: EFH Assessment, Biological Assessment, Pinniped Assessment, Environmental Consequences.

Name/Title: Corey Wisneski, Research Associate, Battelle

**Education:** M.E.M. Environmental Management, Yale School of Forestry and Environmental Studies

3 years experience in the environmental field managing threatened and endangered species and Experience: researching and writing species management plans and environmental impact statements and assessments

Contributed to: Recreational Fishery Intercept Survey, EFH Assessment, Biological Assessment, Role in EIS:

**Environmental Consequences.** 

### Curry & Kerlinger, LLC

Name/Title: Paul Kerlinger, Ph.D., Curry & Kerlinger, LLC, Principal

Bachelor's Degree - 1976, State University of New York, College at Oneonta; Master's Degree -**Education:** Biology, 1981, State University of New York at Albany; 1982, Ph.D. - Biology, 1982, State University of New York at Albany.

5 years research and teaching at the university level, 7 years experience in nonprofit Experience: conservation sector as Director of the Cape May Bird Observatory and Director of Research for the New Jersey Audubon Society; 10 years experience research and environmental permitting in the wind power and communication tower industry in 20+ states, and 3 countries. Publication record includes more than 100 peer reviewed papers, chapters, industry reports, reports to federal and state wildlife agencies, foundations, and reports for nonprofit conservation organizations; 50+ popular articles, 5 books (2 are leaders in the field of bird migration, publishers include University of Chicago Press and Cornell University Press).

Role in EIS: Design risk assessments and field research, review literature, meet with agencies and organizations regarding risk assessment and research design (scoping, etc.), analyze field data, contributed to avian reports and discussions in Sections 3 and 5.

# **University of Massachusetts**

Name/Title: Jeremy J. Hatch / Associate Professor of Biology

**Education:** PhD 1967 Duke University; BA 1961 Cambridge University

**Experience:** Studied behavioral ecology of birds for 34 years, especially seabirds in Massachusetts. **Role in EIS:** Conducted fieldwork on birds and contributed to the Appendices for Section 5.7.

### **CBX Energy Engineering**

Name/Title: Christopher M. Bryan, P.E., Principal Engineer and Owner of CBX Energy Engineering Education: B.E. Degree in Electrical Engineering from Manhattan College in New York in 1971

**Experience:** Mr. Bryan's experience as a consulting electrical engineer to the Power Industry extends over twenty-five years. Throughout his career he has specialized in the design, analysis, project management and engineering review of power generating stations, substations, transmission interconnections and industrial power distribution systems.

**Role in EIS:** Contributed to the non-biological portions of EIS Section 5.13 on Electrical and Magnetic Fields. He also prepared Appendix 3-C on Transmission Issues for Offshore Wind Farms and participated in the alternatives analysis.

# Tech Environmental Inc.

Name/Title: Peter H. Guldberg, CCM/President

**Education:** B.S. Mathematics, M.I.T.; M.S. Atmospheric Science, The University of Michigan

Experience: 30 years of experience as an acoustic consultant analyzing sound and vibration from energy

projects, industrial facilities and transportation sources.

**Role in EIS:** Served as project manager for the acoustic analysis of the project.

Name/Title: Erik Kalapinski, INCE/Acoustic Engineer

**Education:** B.S. Civil and Environmental Engineering, University of Massachusetts; Advanced Studies in Noise

and Vibration Control Engineering, Tufts University

Experience: 10 years of experience as an acoustic consultant analyzing sound and vibration from energy

projects and transportation sources.

Role in EIS: Performed baseline sound level monitoring and acoustic modeling for the project.

Name/Title: Matthew Riegert, EIT/Environmental Engineer

**Education:** B.S. Chemical Engineering, Rensselaer Polytechnic Institute **Experience:** 5 years of experience as an environmental engineer

**Role in EIS:** Performed data analysis for the acoustic analysis of the project.

#### Applied Science Associates, Inc.

Name/Title: Craig Swanson, Senior Engineer, Principal, Applied Science Associates, Inc.

**Education:** Ph.D. Ocean Engineering, University of Rhode Island 1986; M.S. Ocean Engineering, University of Rhode Island 1976; M.S. Mechanical Engineering, University of Bridgeport 1973; B.S. Mechanical Engineering, Purdue University 1970

**Experience:** Dr. Swanson specializes in the development and application of computer models simulating environmental processes in marine and freshwater systems. These processes include hydrodynamics, pollutant and sediment transport in rivers, lakes, estuaries and coastal regions. He has been active in the development of new modeling approaches as well as application of various techniques and models to specific locations. Dr. Swanson has over 30 years experience in model development and application as well as project and company management.

Role in EIS: Assembled the sediment data required for model simulations; Authored the report

Name/Title: Chris Galagan, Senior Scientist, Applied Science Associates, Inc.

**Education:** M.S. Geology, University of Rhode Island, 1990; B.S. Geology, George Mason University, 1987

**Experience:** Mr. Galagan is a senior scientist and project manager specializing in the application and development of Geographic Information Systems, relational databases, and decision support systems for both scientific and management application. He has 14 years experience designing and developing decision support software applications, integrating GIS technology with marine-based numerical models, and applying modeling technologies to aquatic and terrestrial systems.

Role in EIS: Assembled the sediment data required for model simulations; Authored the report

Name/Title: Tatsusaburo Isaji, Senior Engineer, Applied Science Associates, Inc.

**Education:** M.S. Ocean Engineering, University of Rhode Island, 1979; A.S. Electrical Engineering, Aichi Industrial University, Nagoya, Japan, 1971; B.S. Aquaculture, Tokyo University of Fisheries, Tokyo, Japan, 1968 **Experience:** Mr. Isaji has a strong background in the conceptual formulation of coastal processes and implementation of numerical codes to model these processes. During the past ten years he has developed a comprehensive library of software tools to facilitate such problem-solving.

**Role in EIS:** Assembled the hydrodynamic data used in the model simulations; Set up and ran the SSFATE model simulations

## Ocean Surveys, Inc.

Name/Title: Thaddeus A. Nowak, Jr., P.G. Geophysical Section Manager, Senior Geophysicist

**Education:** B.S. Geology, University of Massachusetts, 1976; Master Program Studies Geophysics, Univ. of Arizona, 1979-1981

**Experience:** Mr. Nowak has extensive experience in the design and implementation of geophysical/geological site investigations. His several areas of specialization include: reflection, refraction, earthquake seismology, gravity, magnetics, sedimentology and structural geology. He is well versed in applying computer technology to acquiring, processing and analyzing geotechnical data.

**Role in EIS:** Mr. Nowak was OSI's program manager for all of OSI's activities related to the project. In that role he was actively involved in the design, planning, execution and reporting of OSI's investigation.

Name/Title: Jeffrey D. Gardner, P.G., C.P.G., Project Manager – Geological Oceanograpgher

**Education:** B.S. Marine Geology, Southampton College, 1986; M.S. Geological Oceanography, Old Dominion University, 1989

**Experience:** Mr. Gardner's professional areas of specialization include geomorphology, sediment dynamics, and stratigraphy of the coastal environment. He also is experienced in coastal oceanography, primarily addressing geological structures and hydrodynamic forces.

Role in EIS: Mr. Gardner participated in the data analysis and reporting phase of the OSI report.

Name/Title: Justin Bailey, Project Manager – Geology/Geophysics Education: B.S. Cum Laude, Geology, Wayne State University, 1997

M.S. Geology/Hydrogeology, Western Michigan University, 1999

**Experience:** Mr. Bailey's area of expertise include geophysical investigations using magnetic and electromagnetic, ground penetrating radar, DC resistivity, seismic and gravity methods.

**Role in EIS:** Mr. Bailey was the field project manager during acquisition of the remote sensing data supporting the geotechnical and archaeological components of the EIS. He also had the lead role in the analysis and reporting phases of OSI's report.

# <u>GZA</u>

Name/Title: James A. Cleveland, P.E./Principal

**Education:** BSCE, University of Maine; MS Environmental Engineering, Vanderbilt University

**Experience:** More than 30 years of power plant siting, permitting, engineering, design and construction

experience.

**Role on EIS:** Performed offshore and onshore geotechnical investigations.

Name/Title: David R. Carchedi, Ph.D., P.E./Project Manager

**Education:** BSCE, University of Lowell, Massachusetts; MS Ocean Engineering, University of Rhode Island;

Ph.D. Civil Engineering, University of Rhode Island

**Experience:** More than 20 years of experience in geotechnical and marine engineering

**Role on EIS:** Performed offshore and onshore geotechnical investigations.

Name/Title: Stephanie J. Banks, P.E., Assistant Project Manager

**Education:** BSc. in Civil Engineering, Technical University of University of Nova Scotia (1997); MSc. in Geotechnical Engineering, University of Alberta (2001)

**Experience:** More than 5 years of experience in geotechnical and geo-civil engineering.

**Role on EIS:** Performed offshore and onshore geotechnical investigations.

## Geo-Marine Inc.

Name/Title: Jerry Michael Grimm, Director, Avian Research Laboratory, GMI Education: Ph.D., Electrical Engineering, Michigan Statue University, 1992.

Experience: 12 years experience in wireless communications, radar operations analysis, and RF system

engineering.

Role in EIS: Avian Radar Survey data analysis and final report

Name/Title: Elizabeth Pruitt, Project Director, GMI

**Education:** M.S, Biological Sciences, Old Dominion University, 1996.

Experience: 7 years experience in environmental projects for DOD, EPA and commercial clients, including

project planning, biological fieldwork and data analysis

Role in EIS: Avian Radar Survey methods analysis and report

### Environmental Design & Research, P.C. (EDR)

Name/Title: John D. Hecklau, Principal – Environmental Services

**Education:** State University of New York, College of Environmental Science and Forestry, Syracuse, New York; Master of Science in Environmental and Forest Biology, Specializing in Wildlife Biology, 1982; Middlebury College, Middlebury, Vermont, Bachelor of Arts in Biology, 1979.

**Experience:** Mr. Hecklau has more than 20 years of experience in visual impact assessments, natural resource management planning, and environmental impact analysis.

**Role in EIS:** Managed all components of EDR's visual analysis for the project, including development of methodologies, oversight of fieldwork, preparation of simulations, methodology write-up and quality control.

Name/Title: Mark P. Crandall, Visual Assessment and Graphics Specialist

**Education:** New York School of Ceramics at Alfred University, Alfred, New York, Concentration in art and design, 1986 to 1988.

**Experience:** Mr. Crandall has 14 years of experience in managing and performing visual and aesthetic impact assessments, developing computer-generated visual simulations, and preparing 3D animations. He specializes in the application of computer graphics for the assessment of visual impacts and the review of design and planning concepts.

**Role in EIS:** Participated in all elements of EDR's visual analysis including development of field work techniques, photo documentation, review of technical specifications, computer modeling and preparation of visual simulations.

Name/Title: Gordon W. Perkins, Visual Technician and Digital Graphics Specialist

**Education:** State University of New York, College of Environmental Science & Forestry, Syracuse, New York; Bachelor of Landscape Architecture, 2001; Keystone College, La Plume, Pennsylvania, Associate's Degree in Arts, 1998.

**Experience:** In his three-year tenure with EDR, Mr. Perkins has applied 2-D and 3-D graphic applications to assess visual impacts of wind power and other power generation and transmission projects. He has conducted ongoing research in the application of technical methodologies used in visual impact assessment, incorporating advanced technologies in data collection, processing, and visual simulation.

**Role in EIS:** Participated in photo documentation, review of technical specifications, computer modeling and preparation of visual simulations.

Name/Title: Douglas W. Magde, Principal – Surveying

**Education:** Paul Smiths College, Paul Smiths, New York, A.A.S. Degree in Forest Technology/Surveying, 1981.

**Experience:** Mr. Magde is a licensed Land Surveyor with more than 20 years of experience in all types of surveying and mapping. His expertise in boundary and topographical mapping is derived from preparing surveys for small individual properties as well as pipelines and powerlines covering multiple towns and counties.

**Role in EIS:** Participated in field data collection, managed survey fieldwork and oversaw quality control for visual survey deliverables.

Public Archaeology Laboratory, Inc. (PAL)

Name/Title: Deborah C. Cox, RPA, Principal Investigator, Public Archaeology Laboratory, Inc.

**Education:** M.A. (anthropology)

**Experience:** Ms. Cox has 28 years of experience in the field of cultural resource management and has been the President of the Public Archaeology Laboratory, Inc. (PAL) since 1982. In her dual capacity as the firm's chief administrator and Senior Archaeologist, Ms. Cox is responsible for all aspects of the business's management, as well the design and successful completion cultural resource management services. Her archaeological experience has involved successful implementation of all stages of research including survey, evaluation, and mitigation of prehistoric archaeological sites. Ms. Cox is fully knowledgeable in all aspects of historic preservation legislation, including Section 106 compliance, consultation, and environmental documentation. She has completed numerous courses in historic preservation and has certificates in Federal Projects and Historic Preservation Law and the Preparation of Federal Agreement Documents.

**Role in EIS:** Contributed to cultural resources discussions in Sections 3 and 5. Prepared cultural reports and appendices

Name/Title: Virginia Adams/Senior Architectural - Historian

**Education:** M.A. (anthropology)

**Experience:** Ms. Adams has 27 years of experience in cultural resource management and historic preservation planning, with particular expertise directing multi-disciplinary projects involving all categories of above-ground resources including districts, buildings, engineering structures, objects, and designed and cultural landscapes. She has extensive experience in the preparation of cultural resources sections of National Environmental Policy Act documents, Section 106 of the National Historic Preservation Act of 1996 documentation and Memoranda of Agreement, Section 4(f) of the National Transportation Act of 1966 evaluations, as well as comparable state-level review documents and historic preservation plans.

**Role in EIS:** Contributed to cultural resources discussions in Sections 3 and 5. Prepared cultural reports and appendices

Name/Title: Anna Graves/Project Archaeologist

**Education:** B.A. (anthropology)

**Experience:** Ms. Graves has directed and coordinated numerous cultural resource management archaeological investigations for federal, state, and private agencies, institutions, and individuals. These investigations have involved the design and implementation of field testing strategies, direction of site survey, data analyses, coordination with Native American Tribes, and the curation of artifact collections.

**Role in EIS:** Contributed to cultural resources discussions in Sections 3 and 5. Prepared cultural reports and appendices

Name/Title: Holly Herbster/Project Archaeologist

**Education**: B.A. (anthropology)

**Experience:** Ms. Herbster has worked in cultural resource management for more than ten years, directing and conducting research, excavation, analysis, report preparation, and public education at all levels of archaeological investigation in New England and the Northeast. Ms. Herbster has extensive experience working with Native American Tribes, including investigations involving the delineation and relocation of human burial features.

**Role in EIS:** Contributed to cultural resources discussions in Sections 3 and 5. Prepared cultural reports and appendices

Name/Title: David Robinson, RPA,/Senior Underwater - Archaeologist

**Education:** M.A. (anthropology)

**Experience:** Mr. Robinson has 13 years of experience in submerged cultural resource management and historic preservation planning. His expertise lies in the management of multi-disciplinary projects involving submerged and terrestrial cultural resources, involving scientific diving, marine remote sensing survey, artifact conservation, and Native American consultation.

**Role in EIS:** Contributed to cultural resources discussions in Sections 3 and 5. Prepared cultural reports and appendices

### Woods Hole Group, Inc.

Name/Title: Robert P. Hamilton, Jr., M.C.E., Coastal Engineer, Woods Hole Group, Inc.

**Education:** M.C.E., Civil Engineering-University of Delaware (1994)

B.S., Civil Engineering-Lehigh University (1992)

**Experience:** Coastal Engineer who has been with the Woods Hole Group for more than 10 years. He specializes in solving problems and managing projects related to shoreline erosion, water quality, and environmental permitting for industrial, governmental, and private clients. Specific areas of expertise include assessment of environmental impacts and regulatory compliance related to power utility intakes and discharges, as well as shore protection strategies for communities. He has advanced technical skills related to numerical modeling, data collection and analysis, and implementation of scientific and engineering strategies to solve complex, multi-disciplinary problems.

**Role in EIS:** Project Manager for study to characterize existing conditions based upon available data, including wind, wave, current, tide, and storm surge literature search, current profile (ADCP) surveys, statistical analysis of data, wind wave modeling, and sediment transport modeling. Performed quality control review on technical work, and prepared reports.

**Name/Title:** Kelly A. Hogan, M.S., Coastal Geologist/Oceanographer, Woods Hole Group, Inc. **Education:** MSc Oceanography with Distinction, University of Southampton, U.K. (2001)

BSc Geology, University of Oxford, U.K. (2000)

**Experience:** Coastal Geologist/Oceanographer who is currently pursuing a Ph.D. in Oceanography at the University of South Hampton, U.K. At Woods Hole Group, she assists with coastal processes projects involving numerical wave analysis models, tide level fluctuation and water velocity models of river/estuary/coastal systems, contamination assessment and remediation solutions, GIS displays and analysis

**Role in EIS:** Performed technical tasks necessary to characterize existing environmental conditions, including wind and wave data analysis, wind wave modeling, and extreme analysis of winds, waves, and currents.

Name/Title: Leonid Ivanov, Ph.D., Physical Oceanographer, Woods Hole Group, Inc.

**Education:** Ph.D. in oceanography, Marine Hydrophysical Institute, Ukranian Academy of Sciences (1990)

M.S. in oceanography, Moscow State University (1978)

**Experience:** Physical oceanographer with Woods Hole Group who has more than 15 years experience on research and consulting projects. His fields of expertise include: analysis of oceanography variability and physical processes in coastal and open ocean waters; studies of physical controls on marine ecosystems; design and implementation of observation systems for multidisciplinary research projects; ecosystem modeling; and knowledge of the implementation of international water projects.

**Role in EIS:** Collected and processed current profile (ADCP) data. Performed data analysis and contributed to reporting of physical oceanographic processes, including tidal currents and storm surge.

Name/Title: Murat Utku, Ph.D., Coastal Engineer, Woods Hole Group, Inc. Education: Ph.D. in Coastal Engineering in 1998. Old Dominion University

M.S. in Coastal and Harbor Engineering in 1994

B.S. in Civil Engineering in 1991

**Experience:** Coastal Engineer with 8 years of applied consulting experience. He has completed a wide range of coastal processes and shore protection projects, including analysis of design wave parameters, beach sediment transport, and tidal currents as the basis for design and permitting of dredging and beach replenishment projects.

**Role in EIS:** Performed sediment transport modeling and data analysis to characterize existing conditions based on available data.

#### Global Insight, Inc.

Name/Title: Robert J. Cuomo, Principal Education: Ph.D. Boston College

**Experience:** Economist with 25 years of corporate, consulting, and teaching experience, with specific areas of expertise in economic analysis, quantitative methods, and financial analysis modeling.

Role in EIS: Principal author of Appendix 5.16-A, and contributed to socioeconomic discussions in Sections 3

and 5.

Name/Title: Philip Hopkins, Principal Education: M.A. Temple University

Experience: Over 15 years experience in preparing economic impact analysis for environmental impact

statements.

**Role in EIS:** Responsible for executing Global Insight's regional models for Appendix 5.16-A under the direction of Dr. Cuomo to assess the economic impacts of the project.

La Capra

Name/Title: Daniel Peaco, President, La Capra Associates

Education: MS, Civil Engineering (Thayer), BS, Civil Engineering (MIT)

**Experience:** 23 years of experience in power systems planning

Role in EIS: Co-Author of Need Analysis

Name/Title: Douglas Smith, Technical Director, La Capra Associates

**Education:** BS Mechanical Engineering (Brown)

**Experience:** 17 years experience in power systems planning

**Role in EIS:** Co-Author of Need Analysis

# Applicant (Cape Wind Associates, LLC.)

Name/Title: Craig Olmsted, Vice President for Project Development Education: MS, Civil Engineering (WPI); MBA (Boston University)

**Experience**: Thirty years of experience in all aspects of the power industry, from project conception through

commercial operation

Role in EIS: Provided data and contributed to discussions on project description, construction, engineering

and economics in Sections 3, 4 and 5

Name/Title: Len Fagan, Vice President of Engineering

**Education:** B.S. Mechanical Engineering, Northeastern University

**Experience**: Over thirty years of experience in the power generation field including preparation of design criteria, management and support of environmental permitting activities, preparation of design build specifications and developing major contracts for a number of power generation projects.

**Role in EIS:** Provided data and contributed to discussions on project description, construction, and engineering in Sections 3, 4 and 5. Primary contributor to Appendix 3.0-A and 3.0-B.